



# NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY

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## IT Fishbones: Investments, Migration, Retirements and Divestment Plan

OVERALL CLASSIFICATION OF THIS BRIEFING IS:  
UNCLASSIFIED





## **(U) Notes for Industry**

(U) NGA's Fishbones are a management tool that helps NGA's leadership execute the Agency's Acquisition Strategy to move to a services-based architecture. They inform a variety of strategic planning decisions which will enable NGA to migrate from our current system of systems architecture to a GEOINT services-based architecture, transition into the IC ITE and JIE cloud environments, and consolidate duplicative services, capabilities, and content. The Fishbones represent NGA's best estimate of our plan at a given time and can change quickly in response to evolving mission needs and resource constraints.

(U) NGA maintains both classified and unclassified versions of the Fishbones. The unclassified version will be made available via NGA's official communication channels. The classified version will be made available to any contractor with the appropriate security clearances via the classified Intelligence Community Acquisition Resource Center (IC ARC). We intend to release updated Fishbones quarterly or as significant changes occur.



# (U) Fishbones: Purpose

1 of 2

## (U) Fishbones:

- (U) Are Capability-based
- (U) Reflect specific plans that help execute the Acquisition Strategy – to move to a services-based architecture
- (U) Horizontal lines on Fishbones charts generally represent IT entities, not a contract view
- (U) Inform the decisions that have been or need to be made for the migration from “System of Systems” to a set of GEOINT services that:
  - Respond to mission requirements
  - Drive NGA’s transition to IC ITE
  - Eliminate duplicate services/capabilities
  - Consolidate content
- (U) Display a comprehensive “snapshot” in time of acquisition plans
- (U) Revised as mission capabilities and solution architecture change



# (U) Fishbones: Purpose

2 of 2

## (U) Fishbones (continued):

- (U) Show relationship of entities and inform decisions for both engineering and funding
- (U) Used as a tool for leadership to monitor progress and execution of plans visualized on the fishbones
- (U) Are a maintained, comprehensive list of IT entities and their capabilities from across NGA
- (U) Assist Portfolio Managers to:
  - Identify trade space
  - Provide explanation of what IT capabilities they are funding



# **(U) Opportunities and Efficiencies**

- (U) Opportunities:
  - Mature alignment of IT capabilities with mission objectives
  - Streamline the implementation architecture
  - Identify gaps, shortfalls, and duplications
- (U) Efficiencies:
  - Reduce complexity, resulting in lower development and sustainment costs
  - Allow incorporation of new acquisition strategies to shorten capability delivery timelines
  - Support new technology insertion

















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## (U) Legend Explained

This table is Unclassified

- **Purple:** Indicates an enduring IT service
- **Gray:** Indicates a legacy IT system that is divesting, some or all capabilities will be replaced
- **Blue:** Indicates a system that will be divested and its capabilities will be retired but not replaced
- **Green:** Indicates non-NGA service capabilities are required such as IC ITE
-  Transition Assessment needed – A transition assessment is still needed. The assessment will determine:
  1. If the capabilities need to continue
  2. The best entity to provide those capabilities
  3. How and when that transition can happen, to include funding and the contract vehicle.
-  Notional Capability Transition – Indicates a notional transition, there is no transition plan per se, but a transition assessment has been completed; requirements, funding and contract have yet to be confirmed.
-  Confirmed/Coordinated Transition – Indicates a basic transition plan is complete. The dates may slip, but the requirements have been allocated, funding has been secured, and the execution contract has been identified.
-  Capability Extension in Work – Work is ongoing to continue the entity.
-  Potential Funding Gap – Work is ongoing to mitigate the gap.

Legend	
	Enduring IT Services
	Legacy IT System
	Retire, Divest
	Non-NGA IT Services
	Transition Assessment Needed
	Notional Capability Transition
	Confirmed/Coordinated Transition
	Capability Extension In Work
	Potential Funding Gap

This table is Unclassified



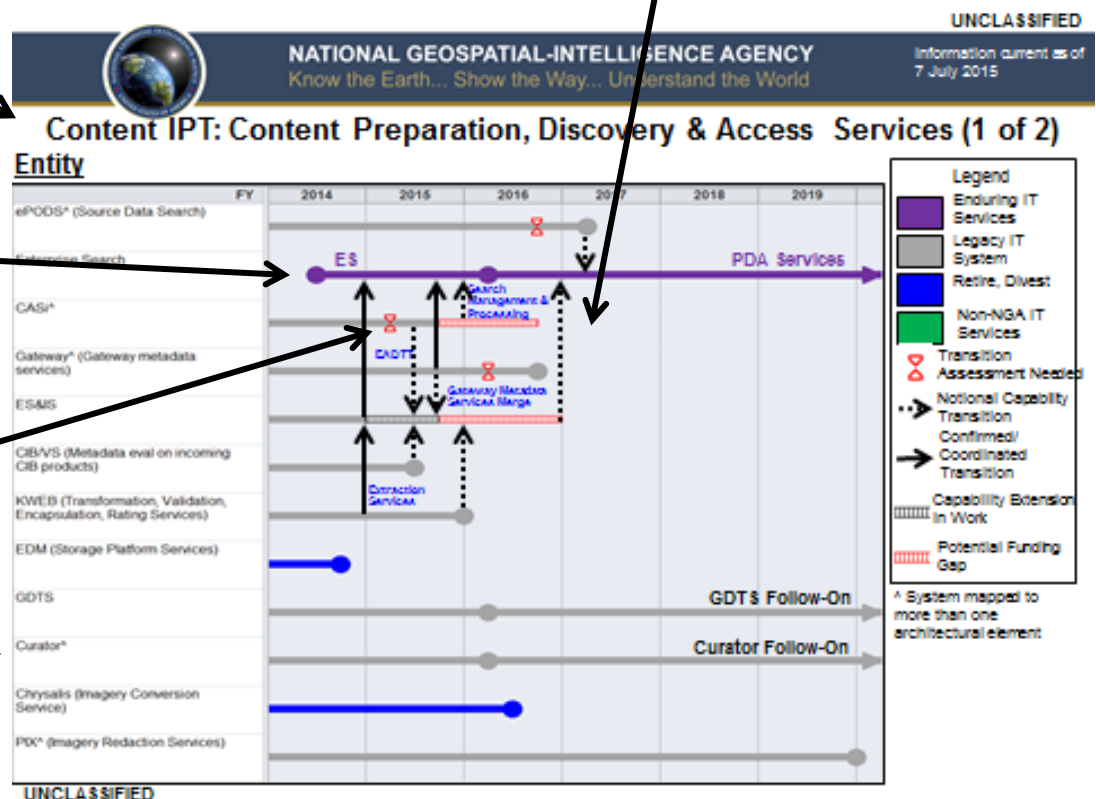
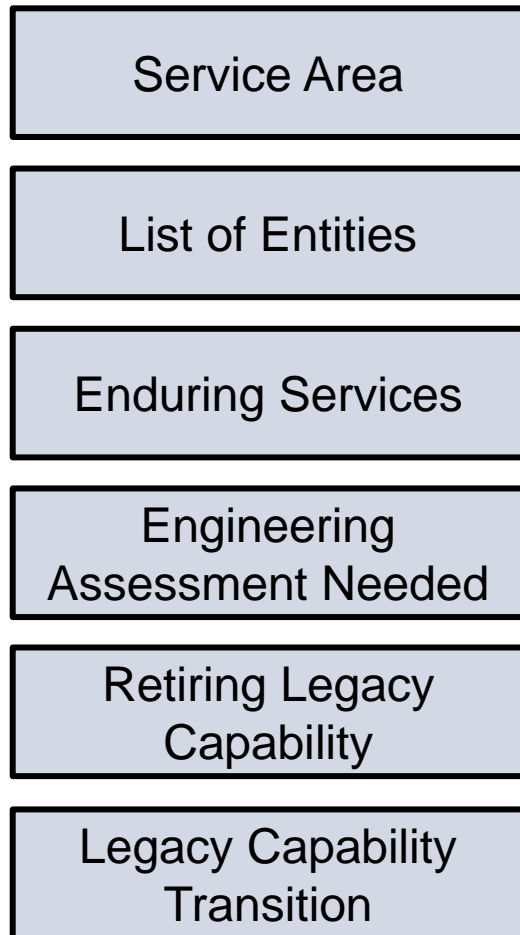


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## (U) How to Read the Fishbones

This figure is Unclassified



No transition plan, Assessment complete; Req'mts, funding and contract to be confirmed

This figure is Unclassified

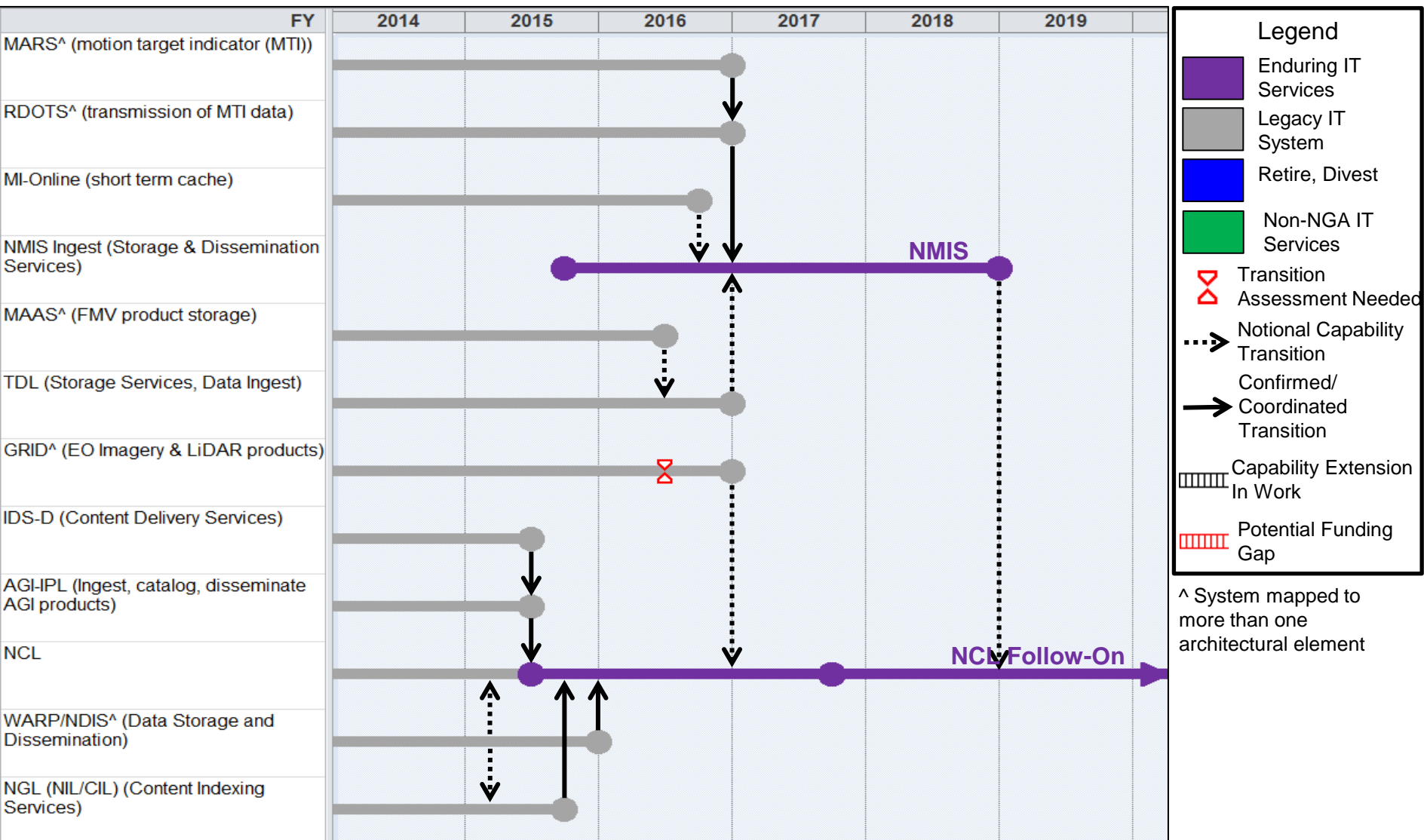


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Information current as of  
1 July 2015

## Entity Content IPT: Library Services (1 of 7)





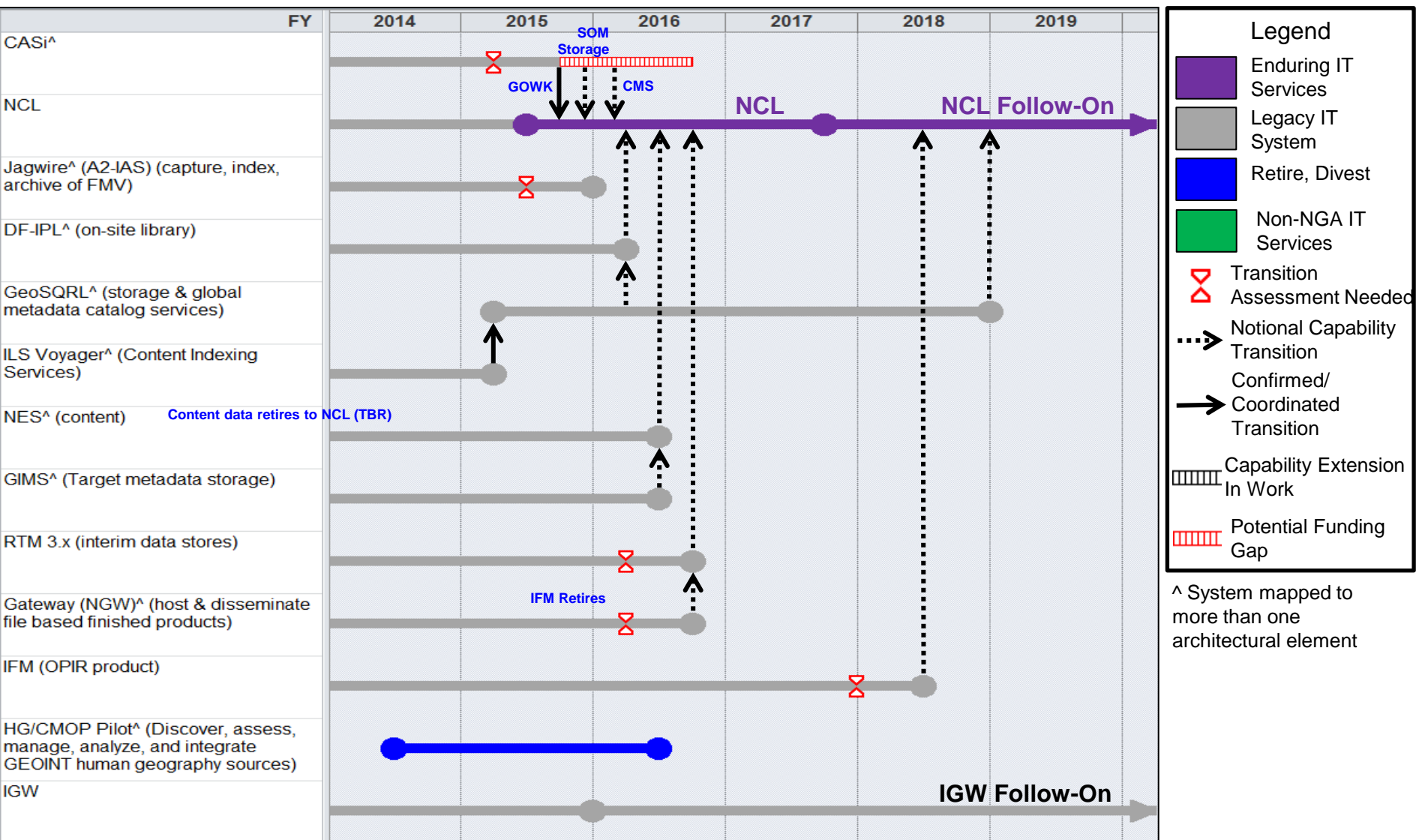


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## Entity Content IPT: Library Services (2 of 7)

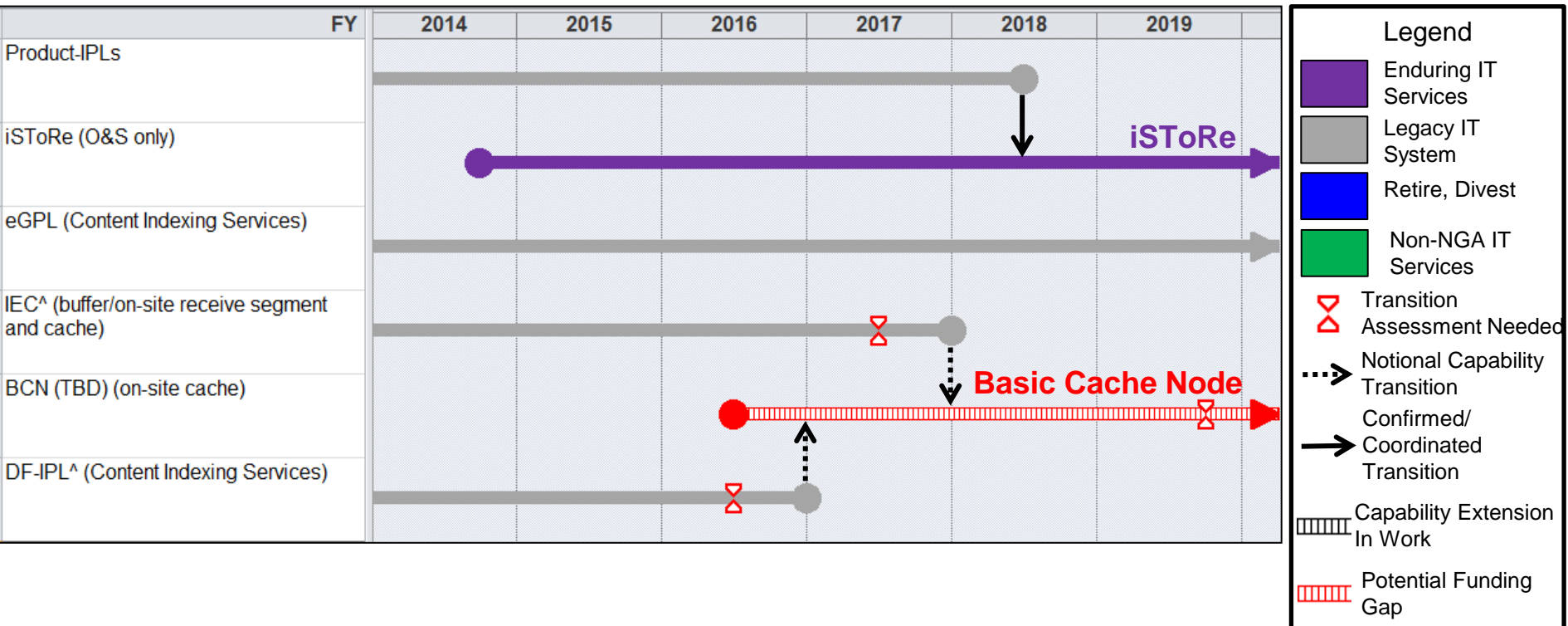




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## Entity Content IPT: Library Services (3 of 7)



<sup>^</sup> System mapped to more than one architectural element

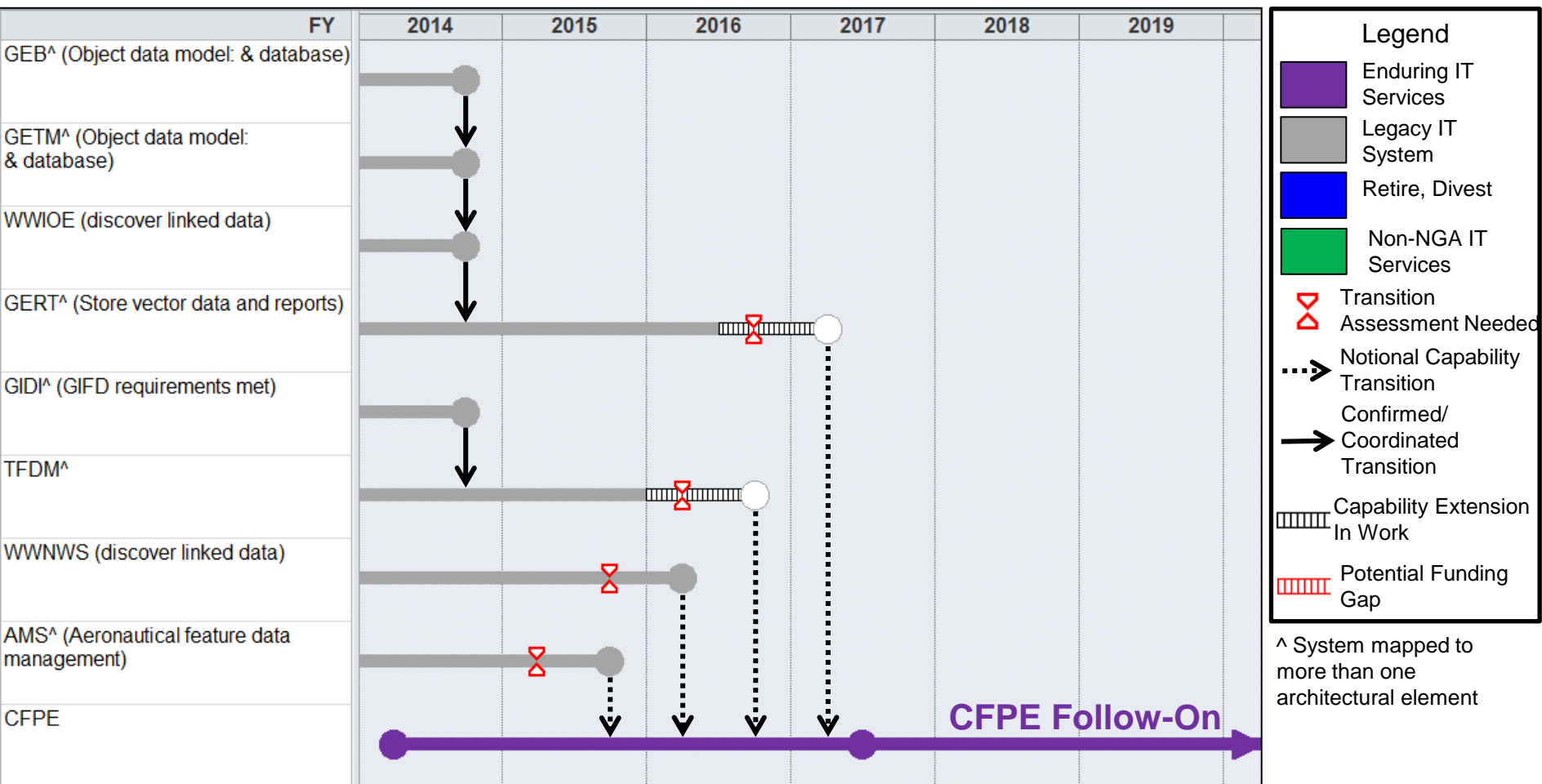


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## Entity Content IPT: Library Services (4 of 7)



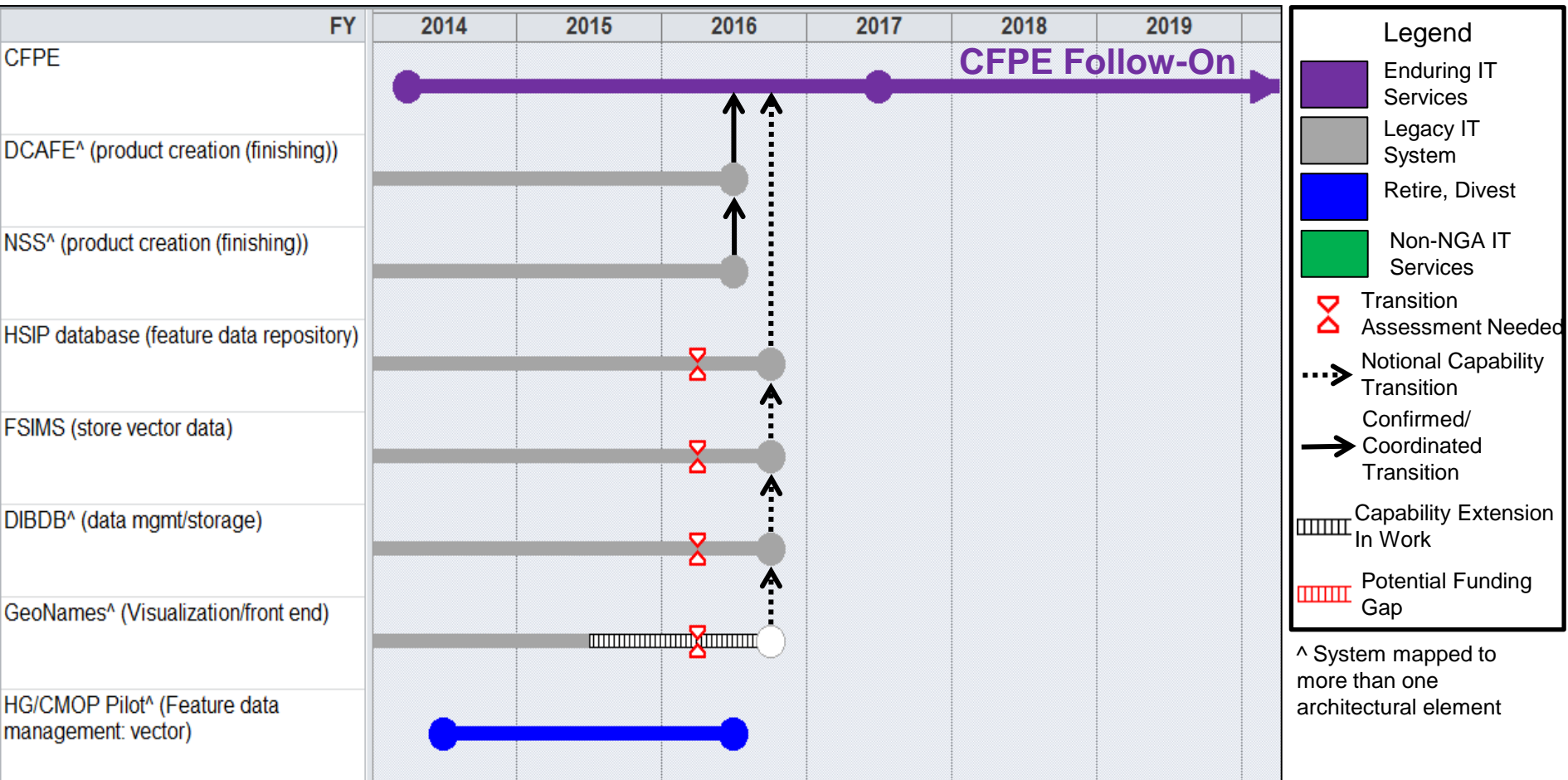




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## Entity Content IPT: Library Services (5 of 7)

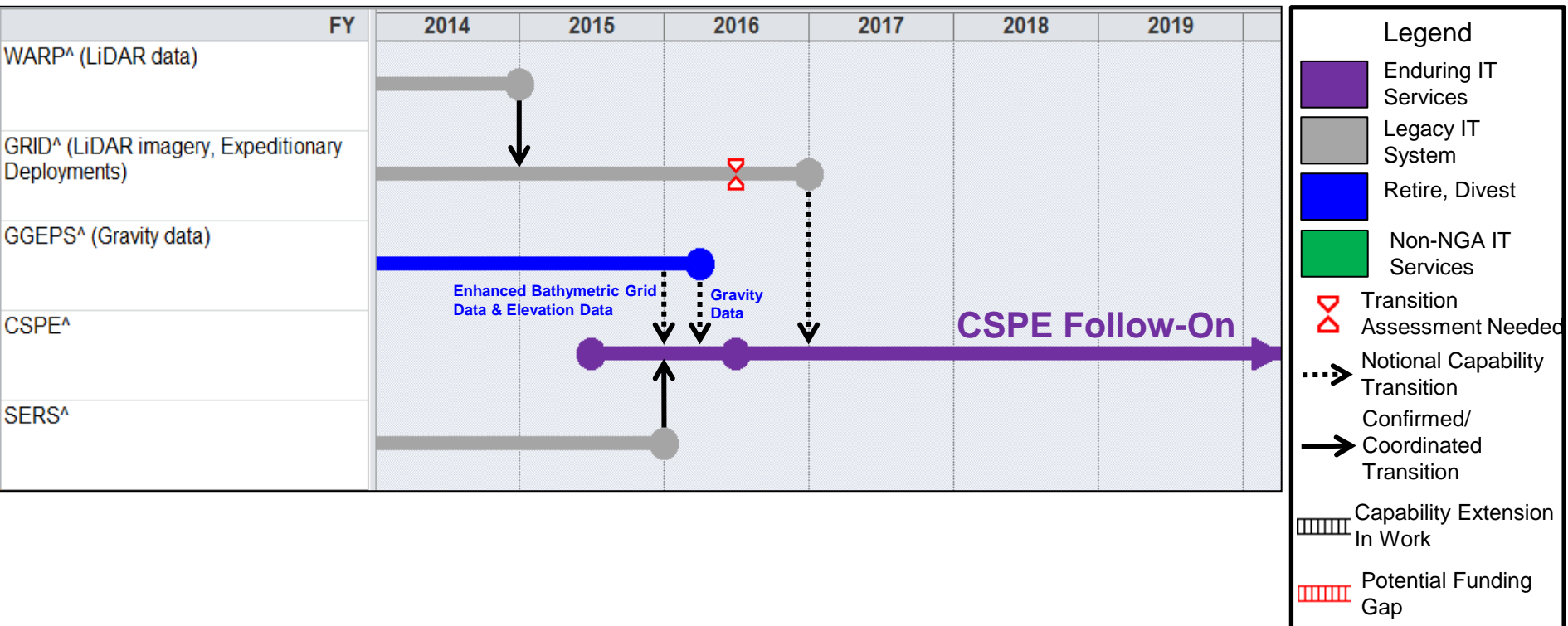




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## Entity Content IPT: Library Services (6 of 7)



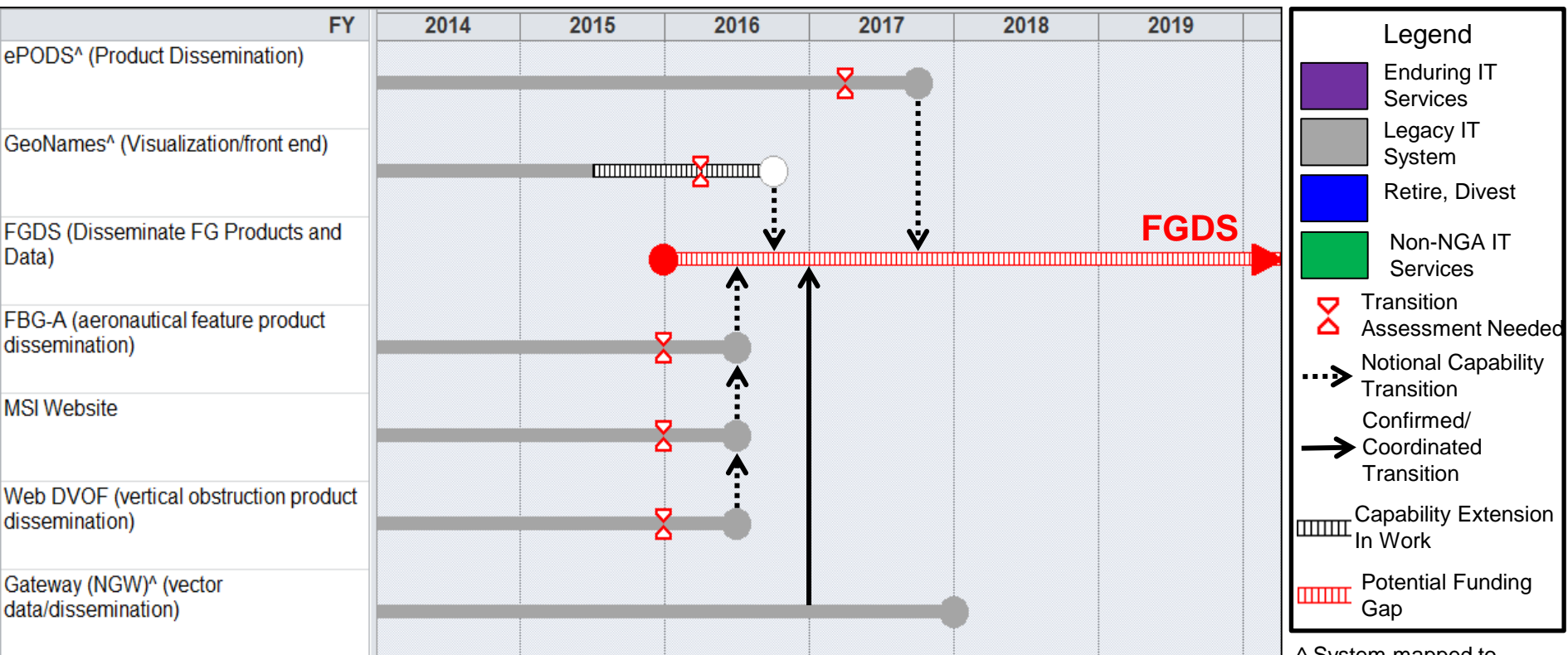
<sup>^</sup> System mapped to more than one architectural element



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<sup>^</sup> System mapped to more than one architectural element



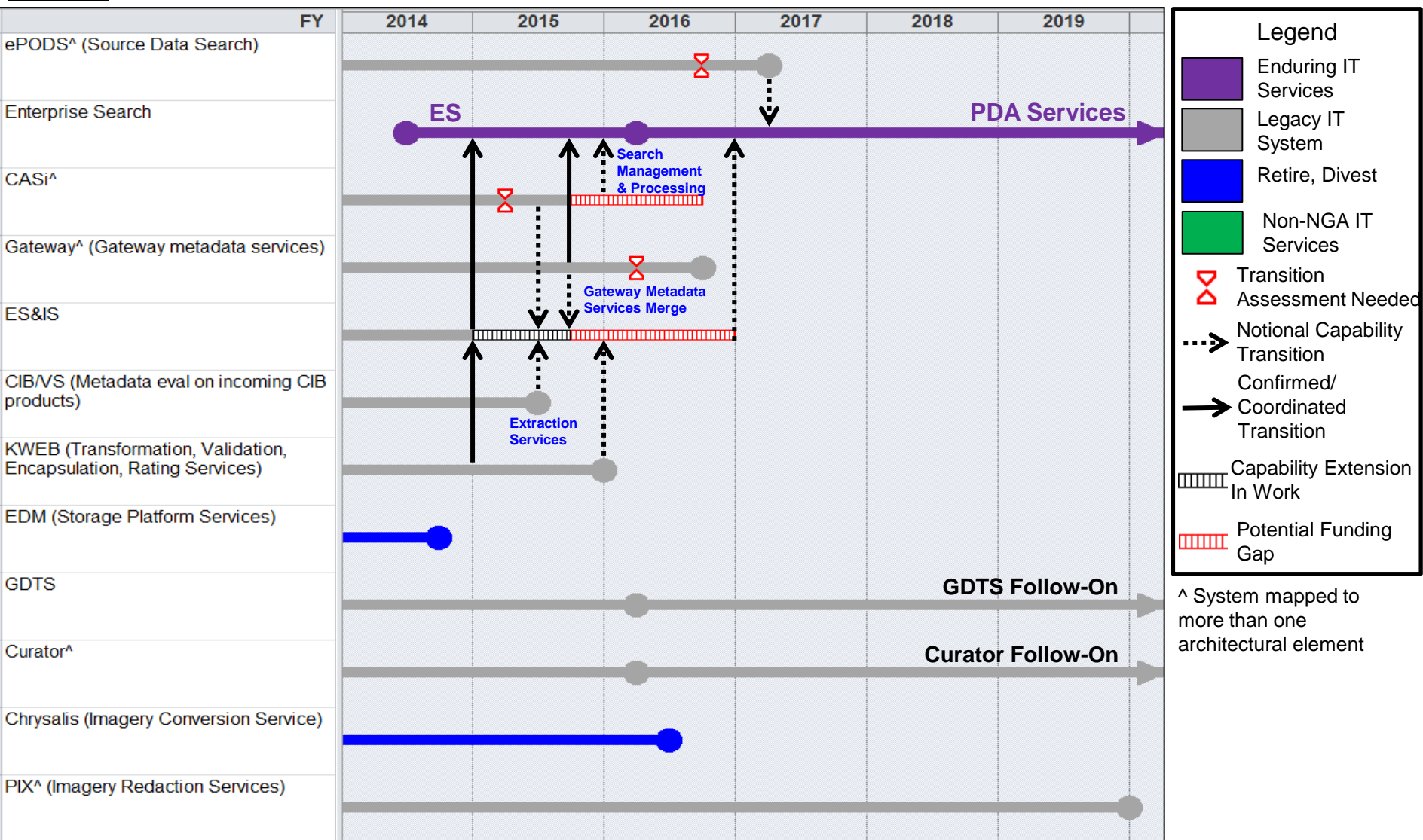


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1 July 2015

## Entity Content IPT: Content Preparation, Discovery & Access Services (1 of 2)



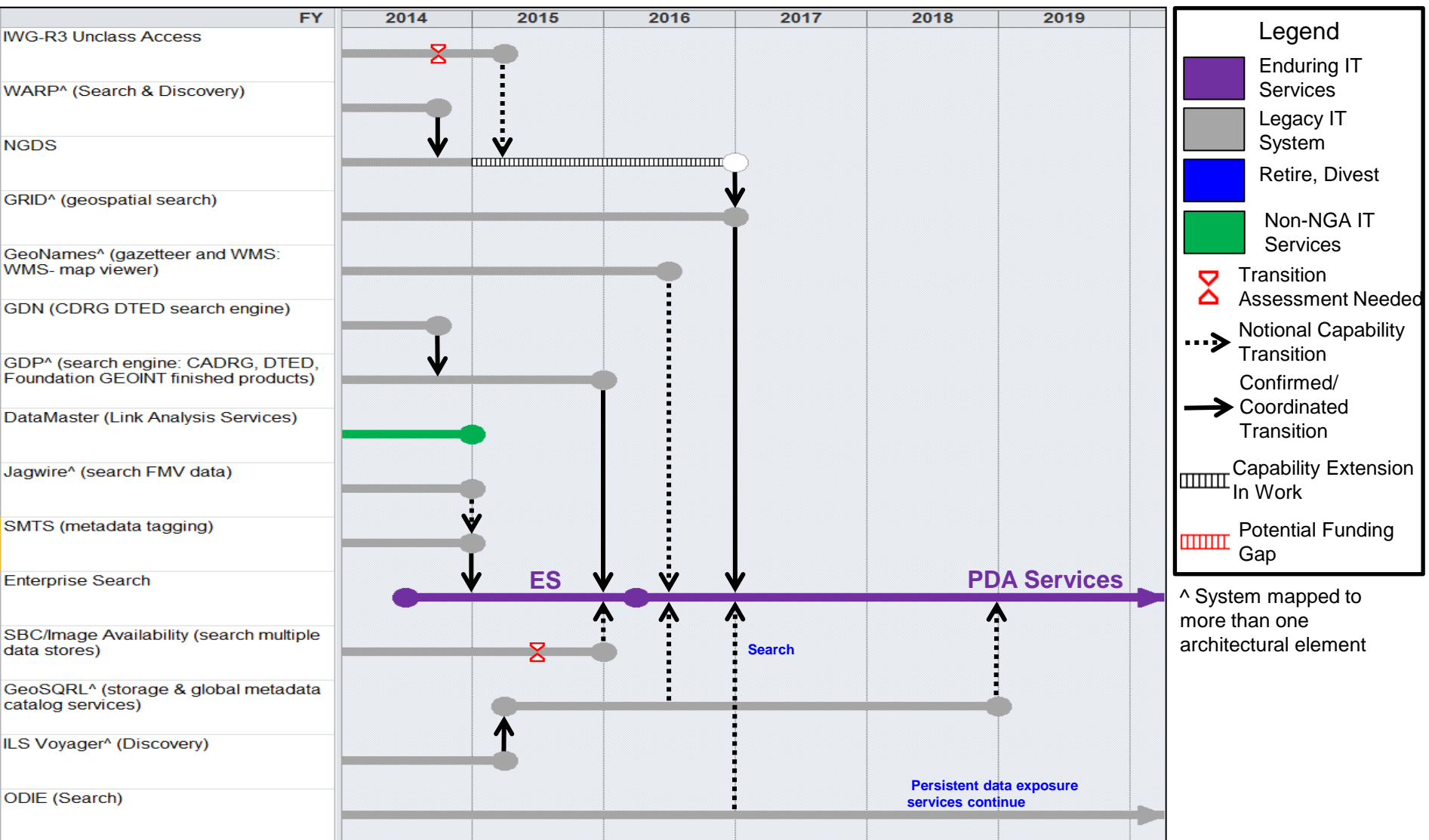


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## Entity Content IPT: Content Preparation, Discovery & Access Services (2 of 2)



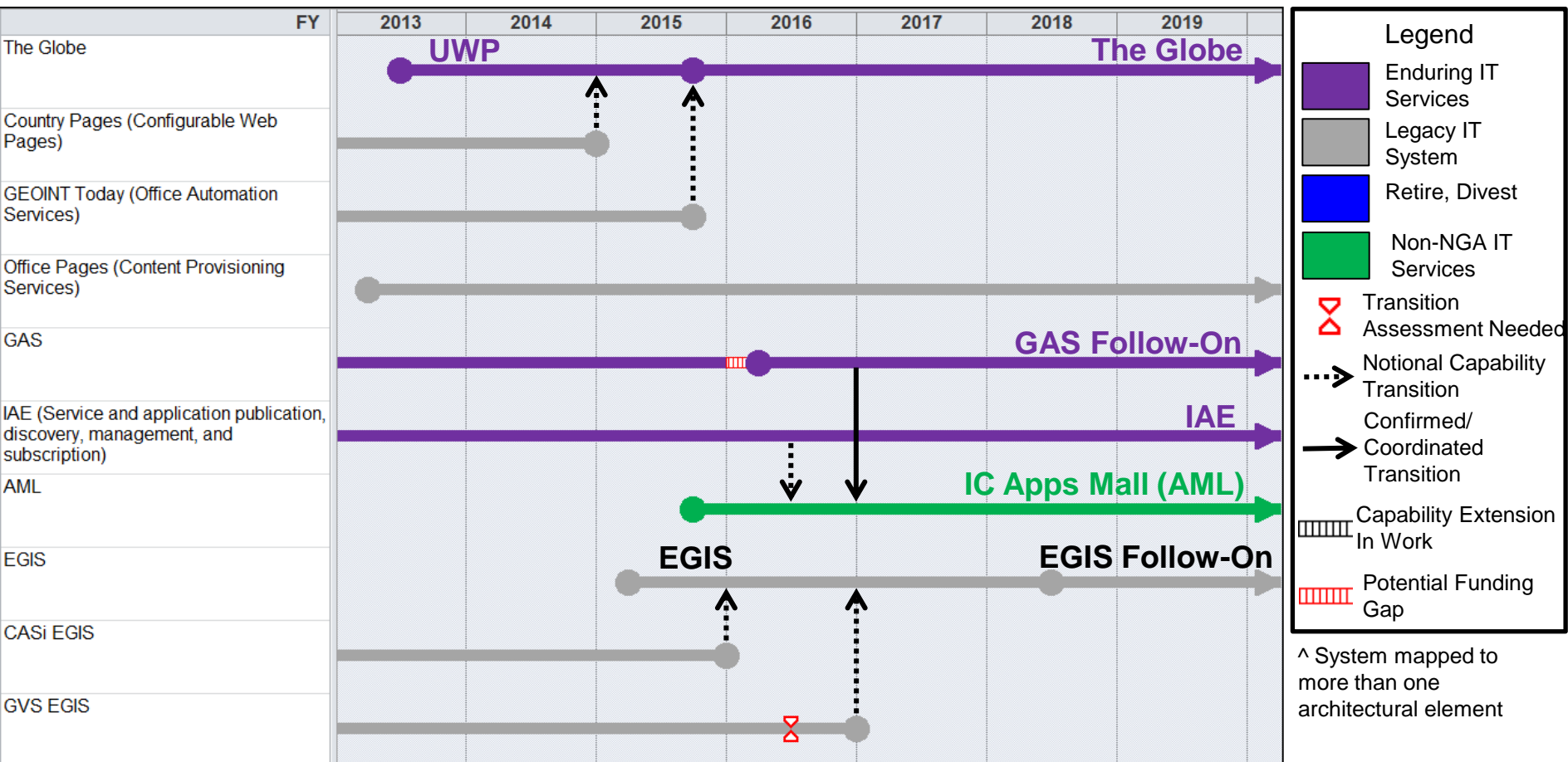


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## Entity

## Content IPT: Content Framework Services





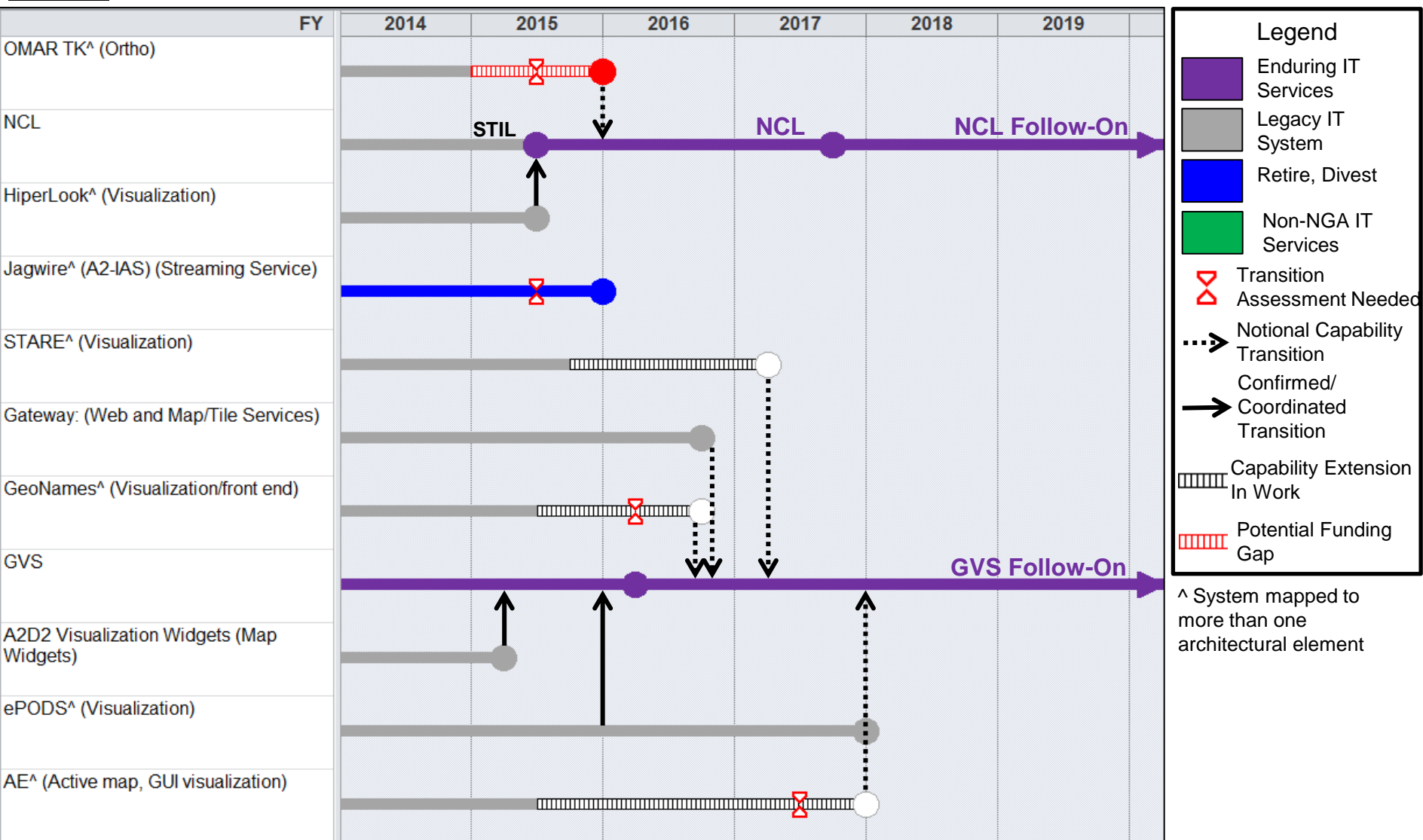


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2 July 2015

## Entity Content IPT: Content Visualization

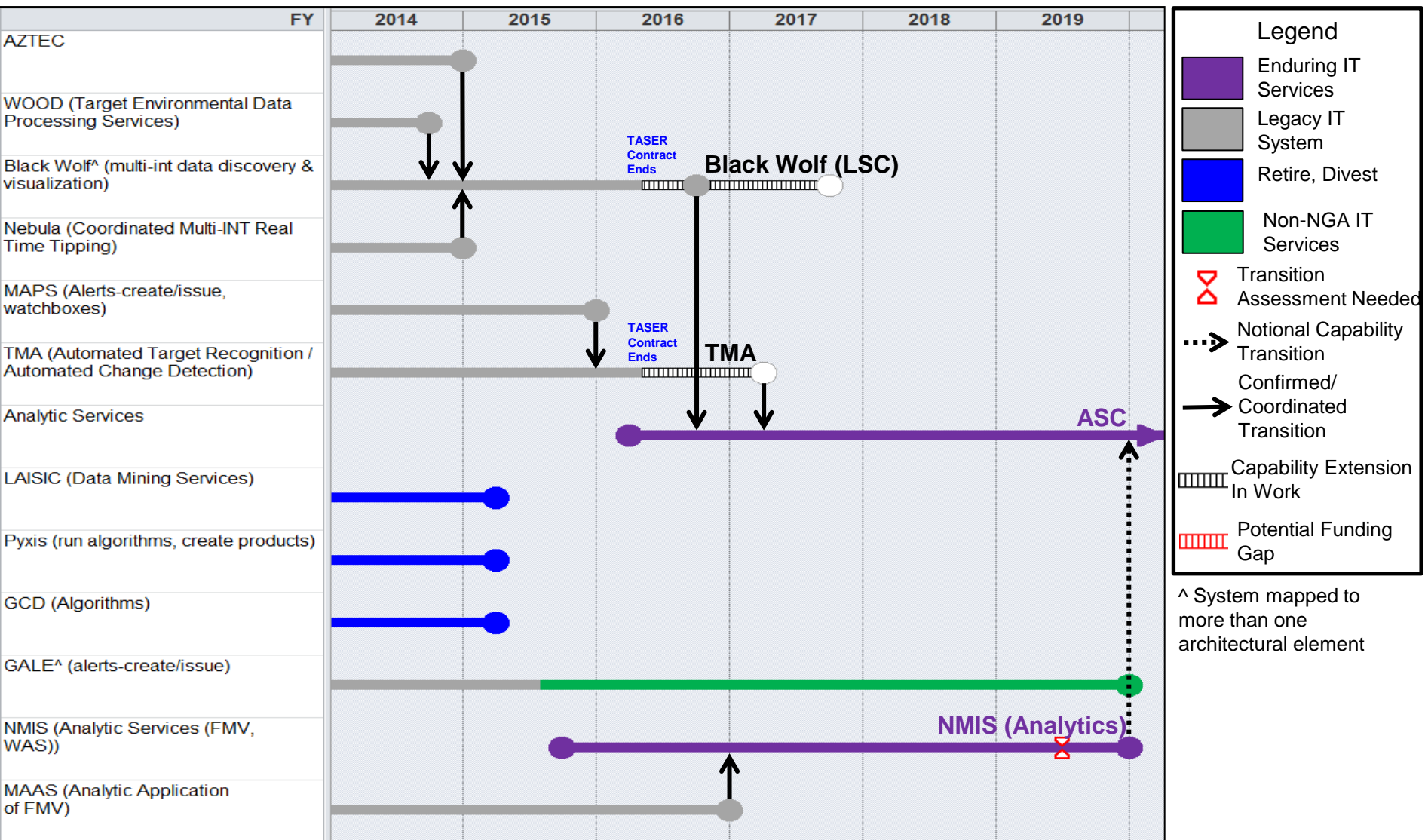




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## Entity Applications IPT: Analytic Services

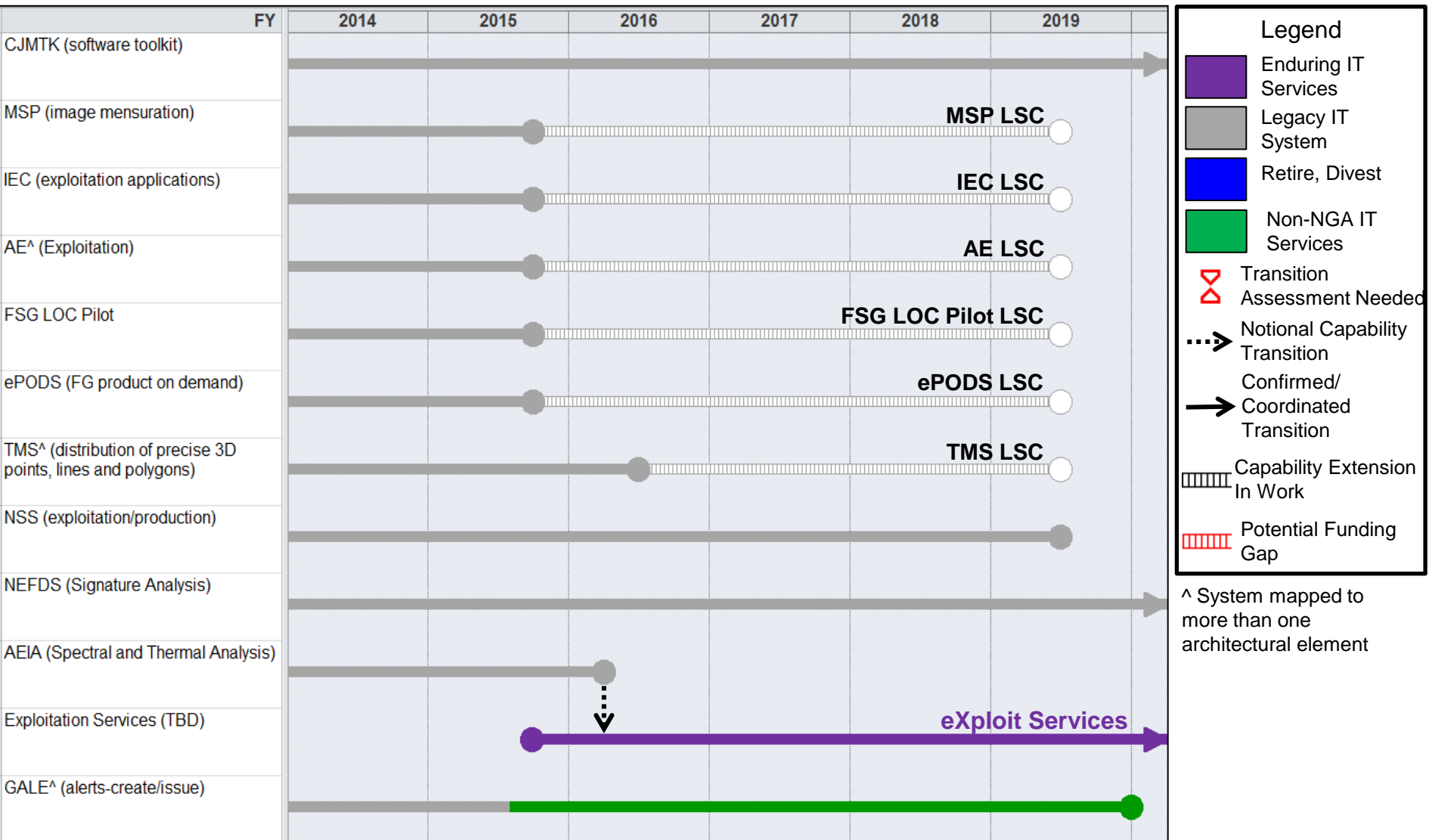




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## Entity Applications IPT: Exploitation (1 of 3)



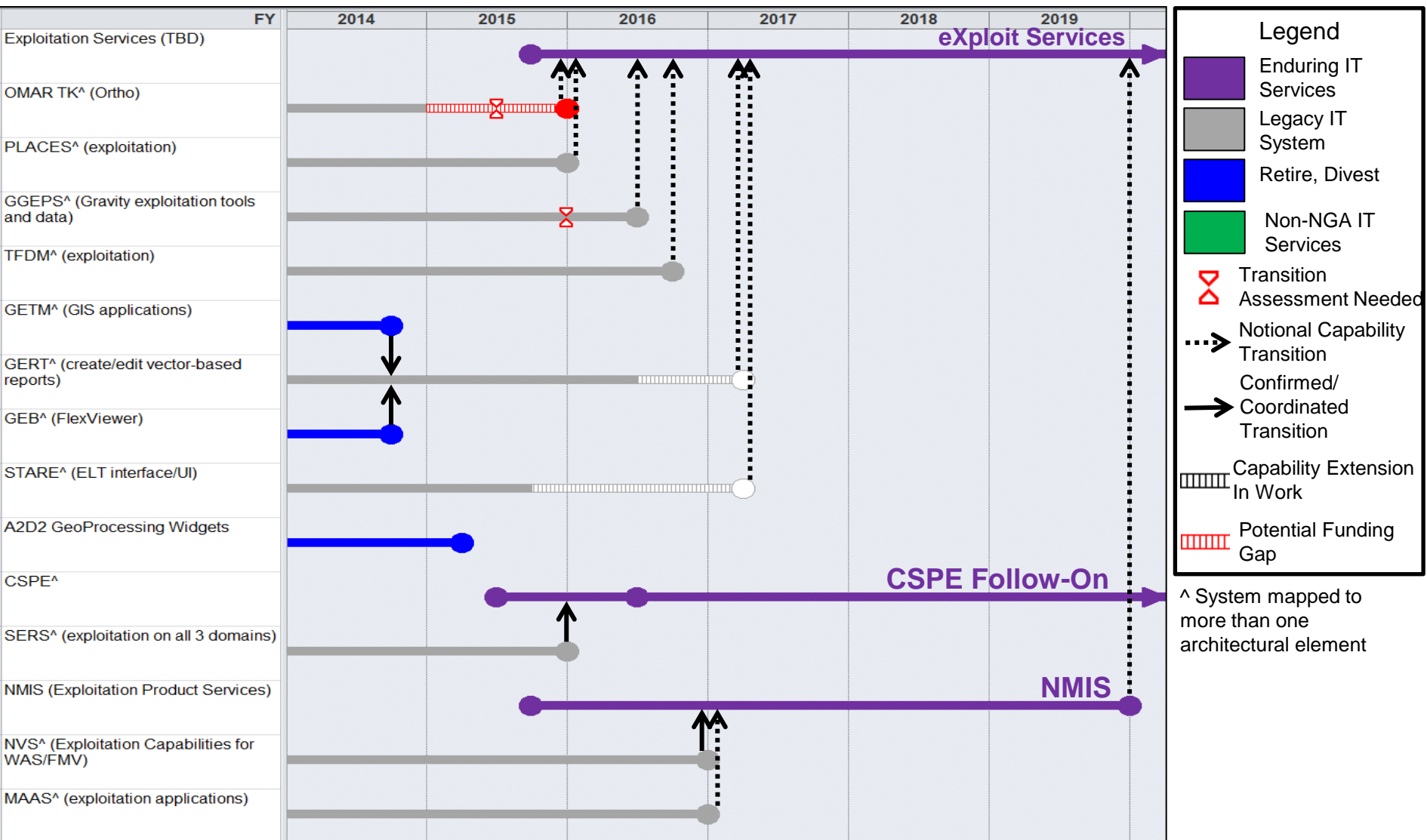




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## Entity Applications IPT: Exploitation (2 of 3)

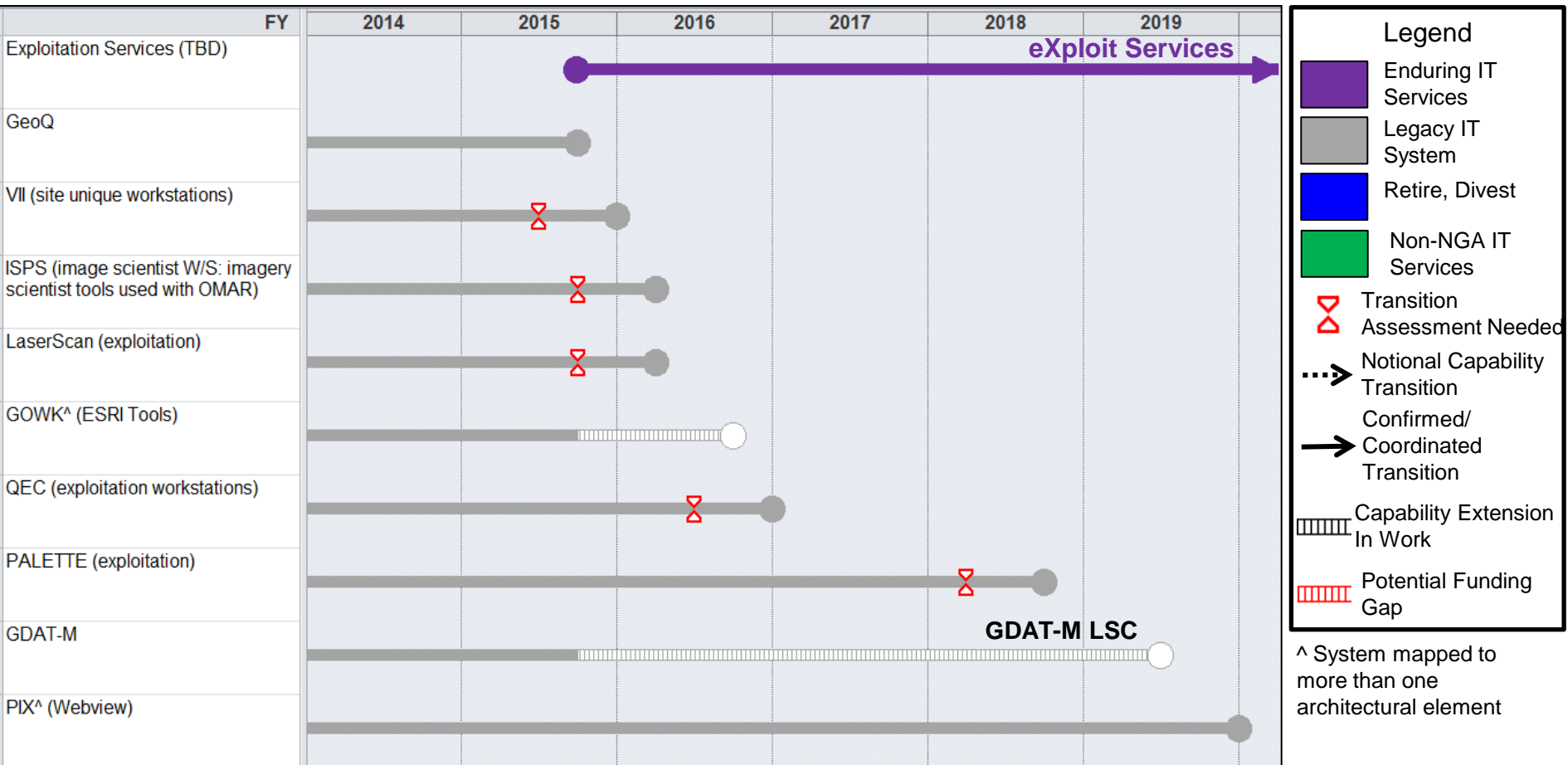




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## Entity Applications IPT: Exploitation (3 of 3)

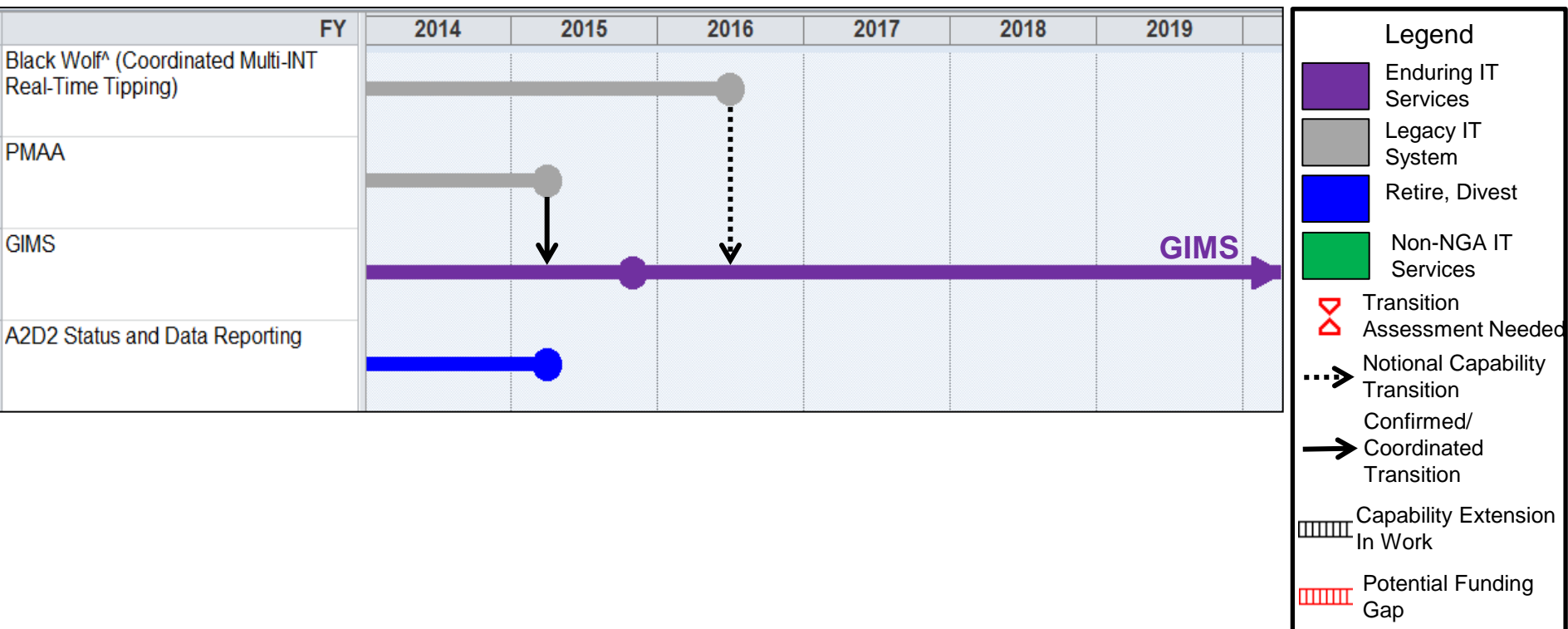




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## Entity Application IPT: Production Management (1 of 3)



<sup>^</sup> System mapped to more than one architectural element

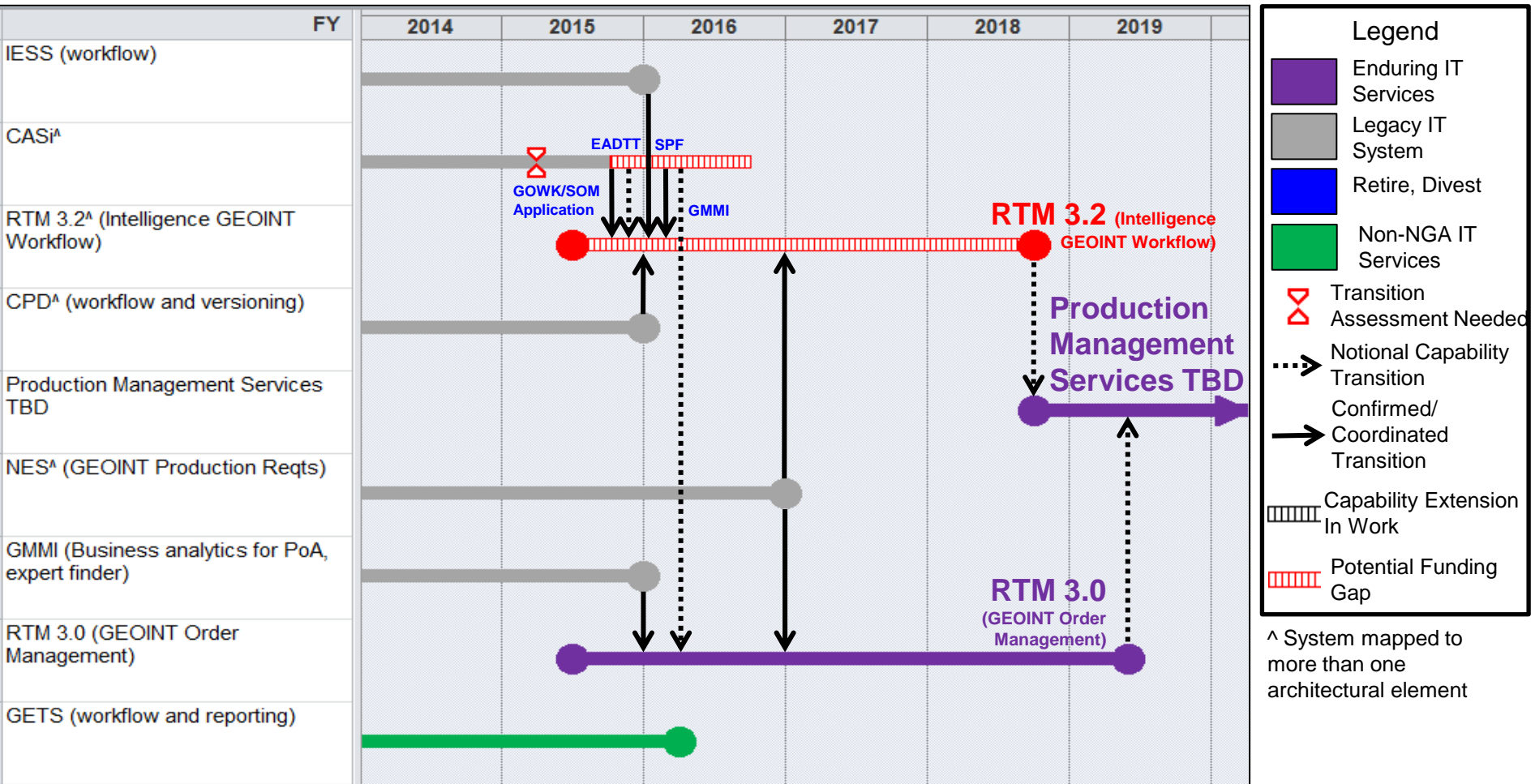


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## Entity Applications IPT: Production Management (2 of 3)





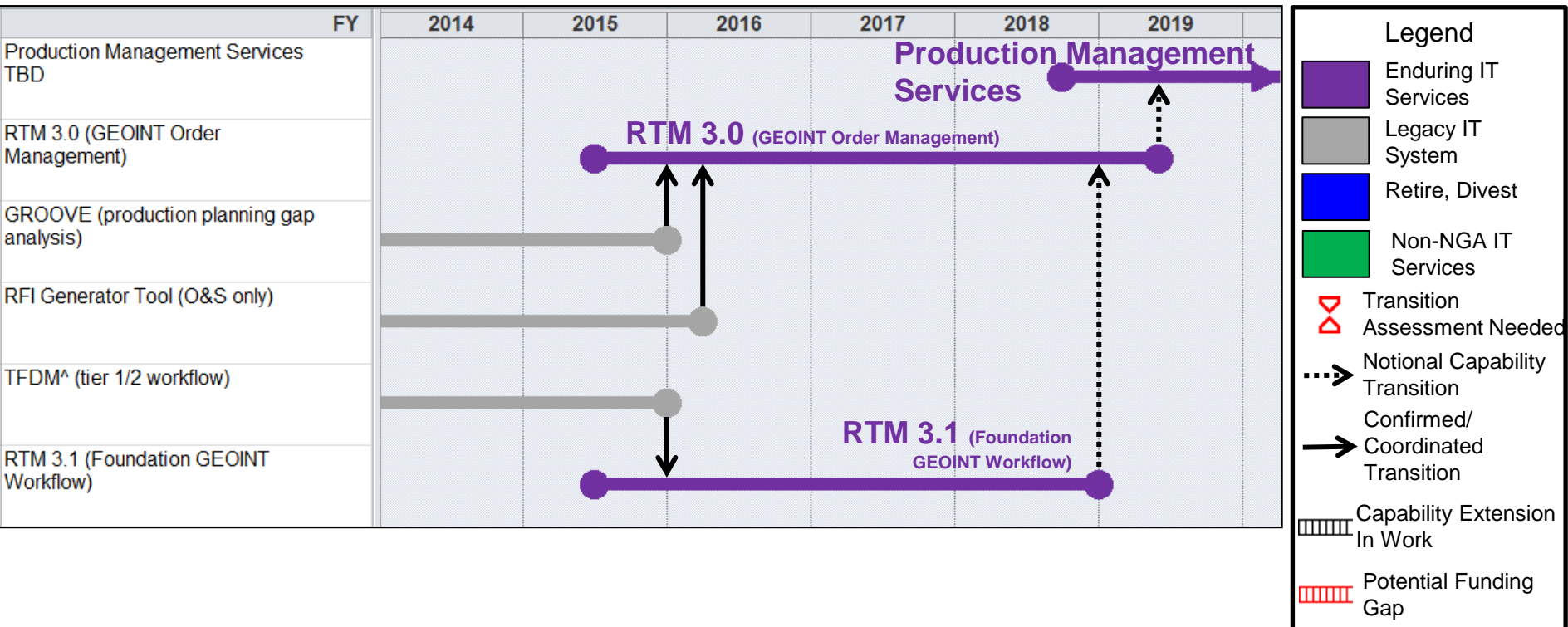


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## Entity Applications IPT: Production Management (3 of 3)



<sup>^</sup> System mapped to more than one architectural element

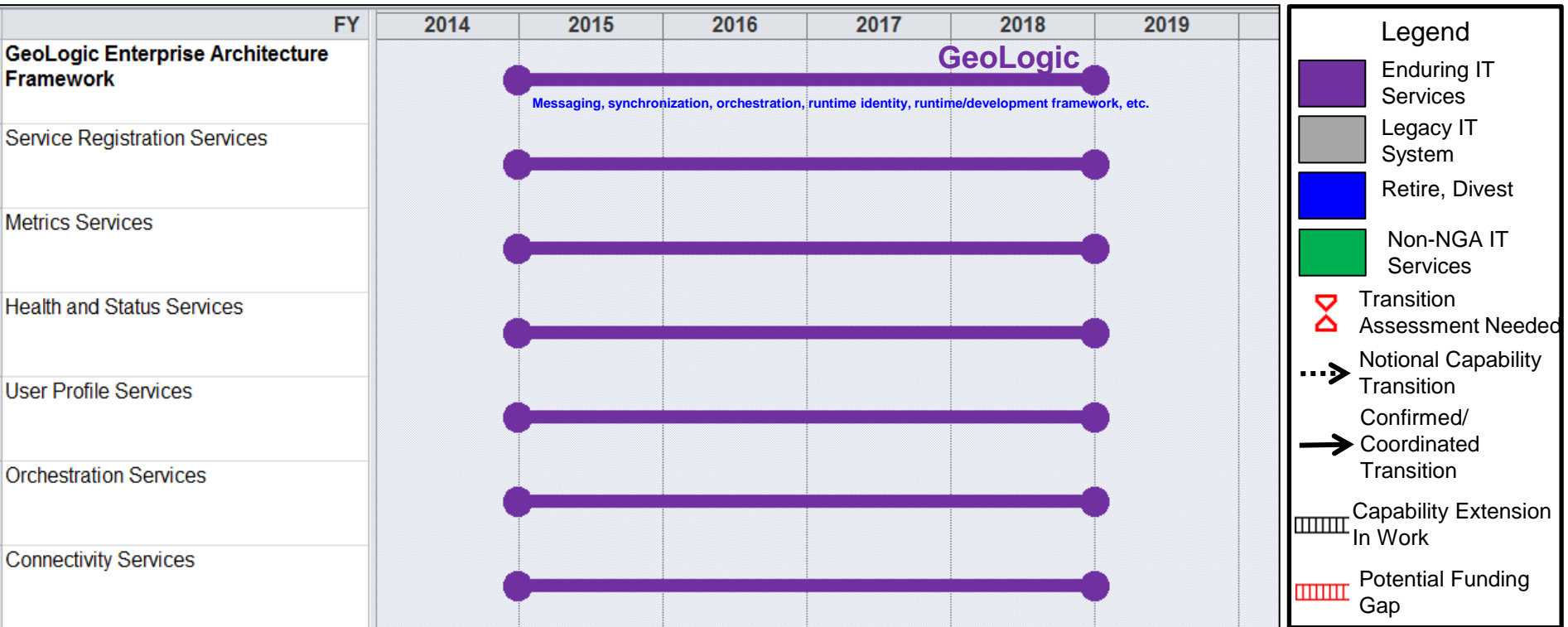


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## Entity Applications IPT: Enterprise Application Services



^ System mapped to more than one architectural element



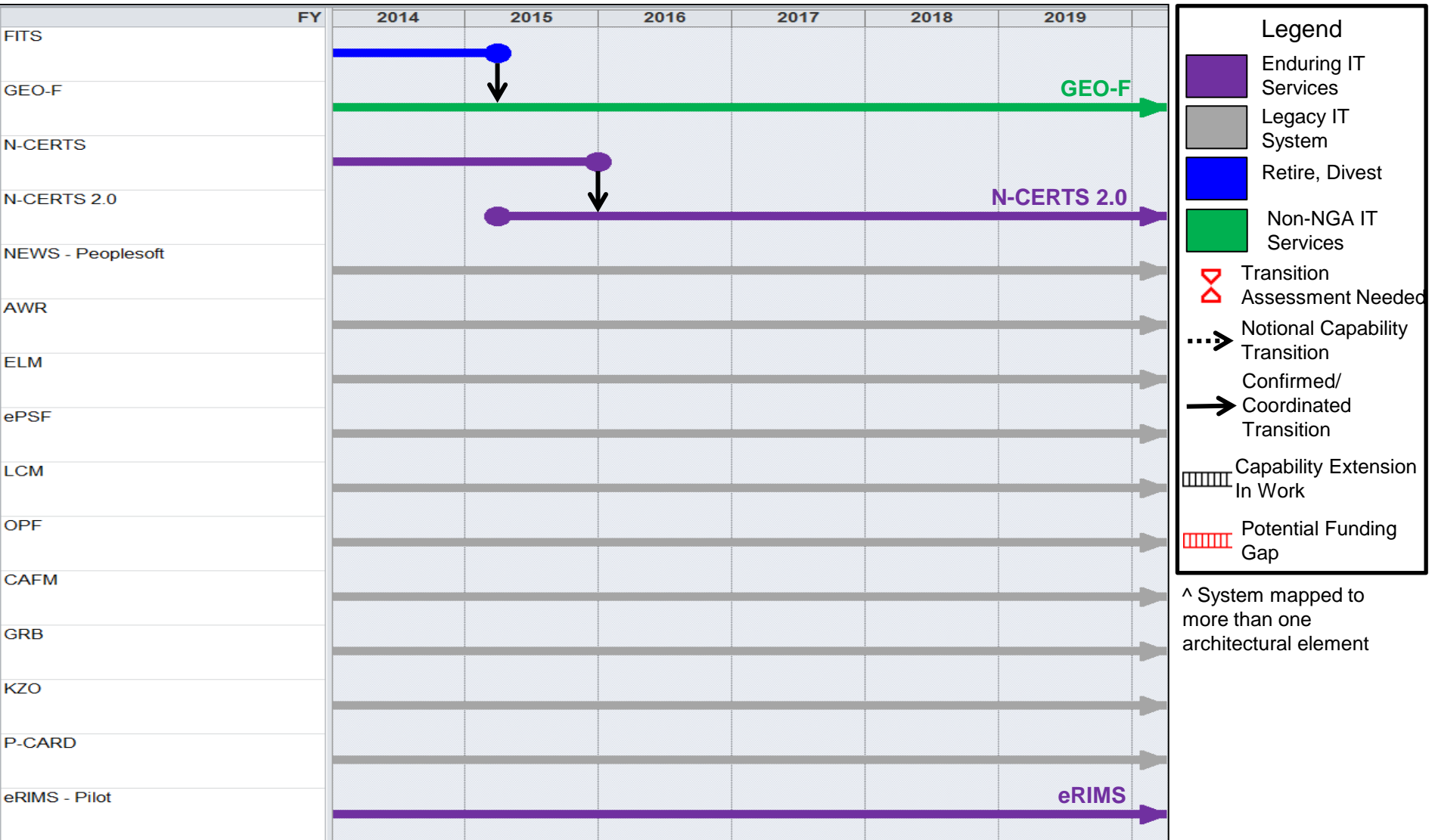


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6 July 2015

## Entity Applications IPT: Corporate Application Services





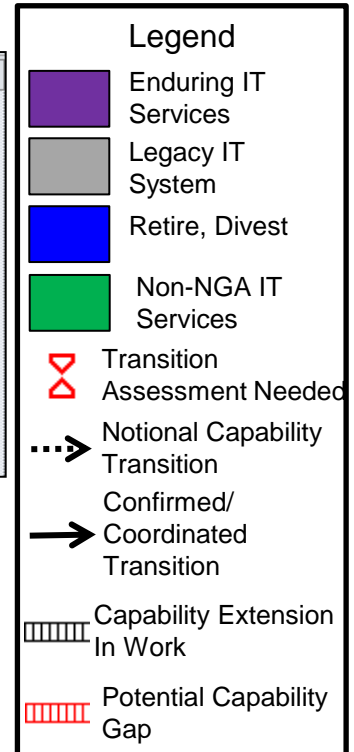
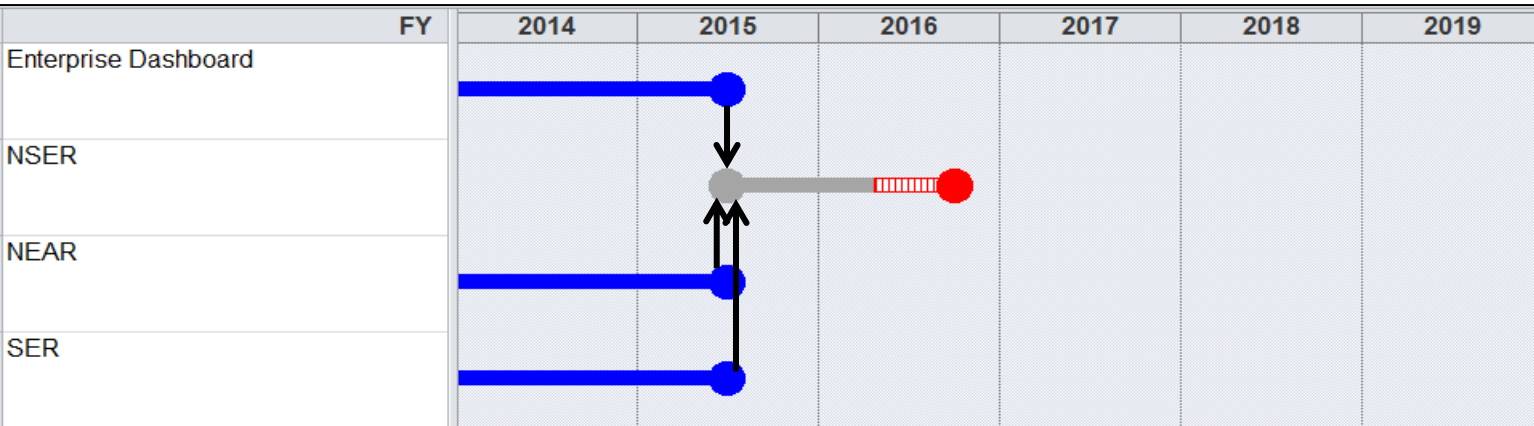
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13 July 2015

## Applications IPT: Corporate Application Services (2 of 2)

### Entity



^ System mapped to more than one architectural element

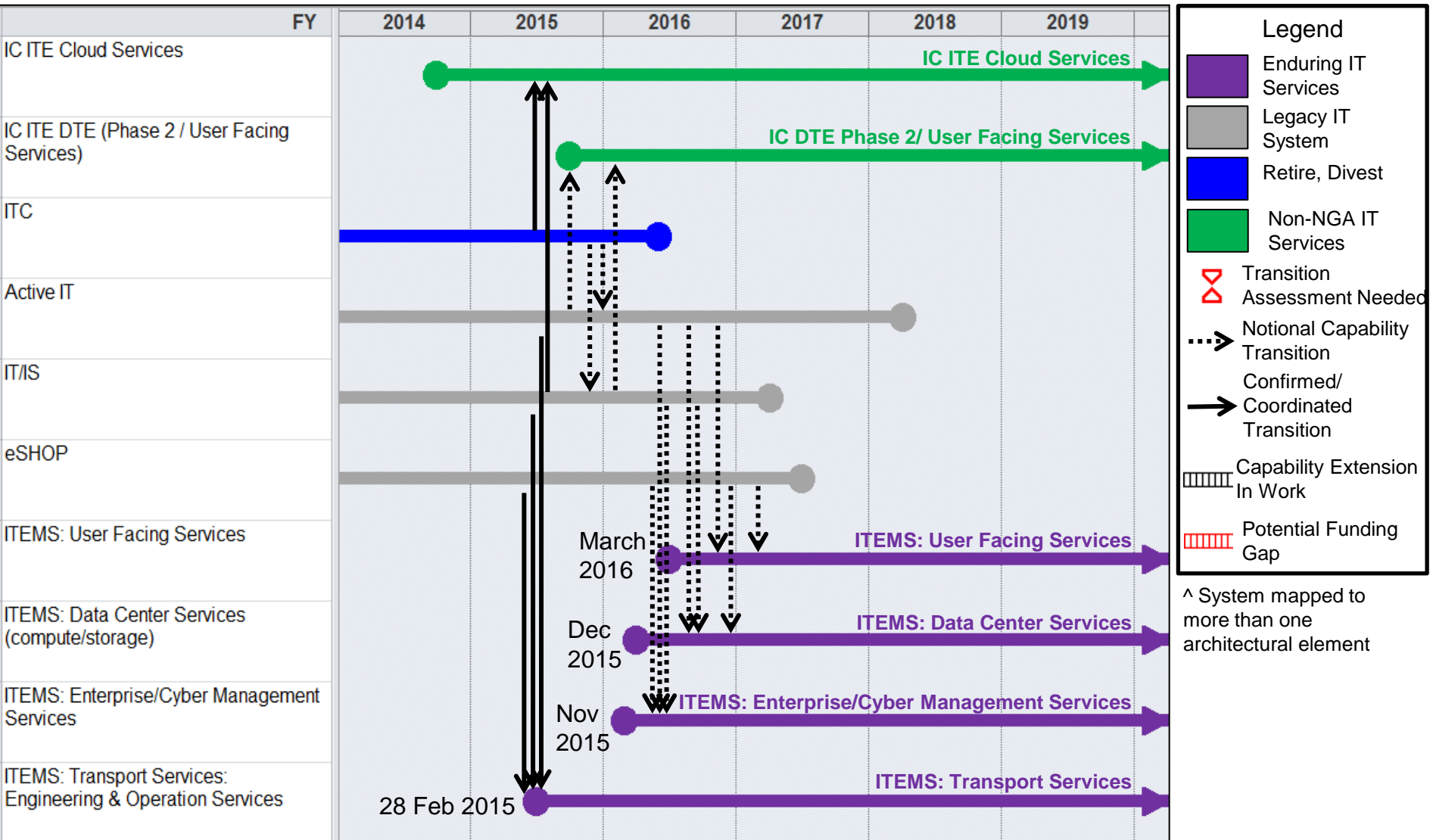


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## Entity

## Open IT IPT: ISP Contracts





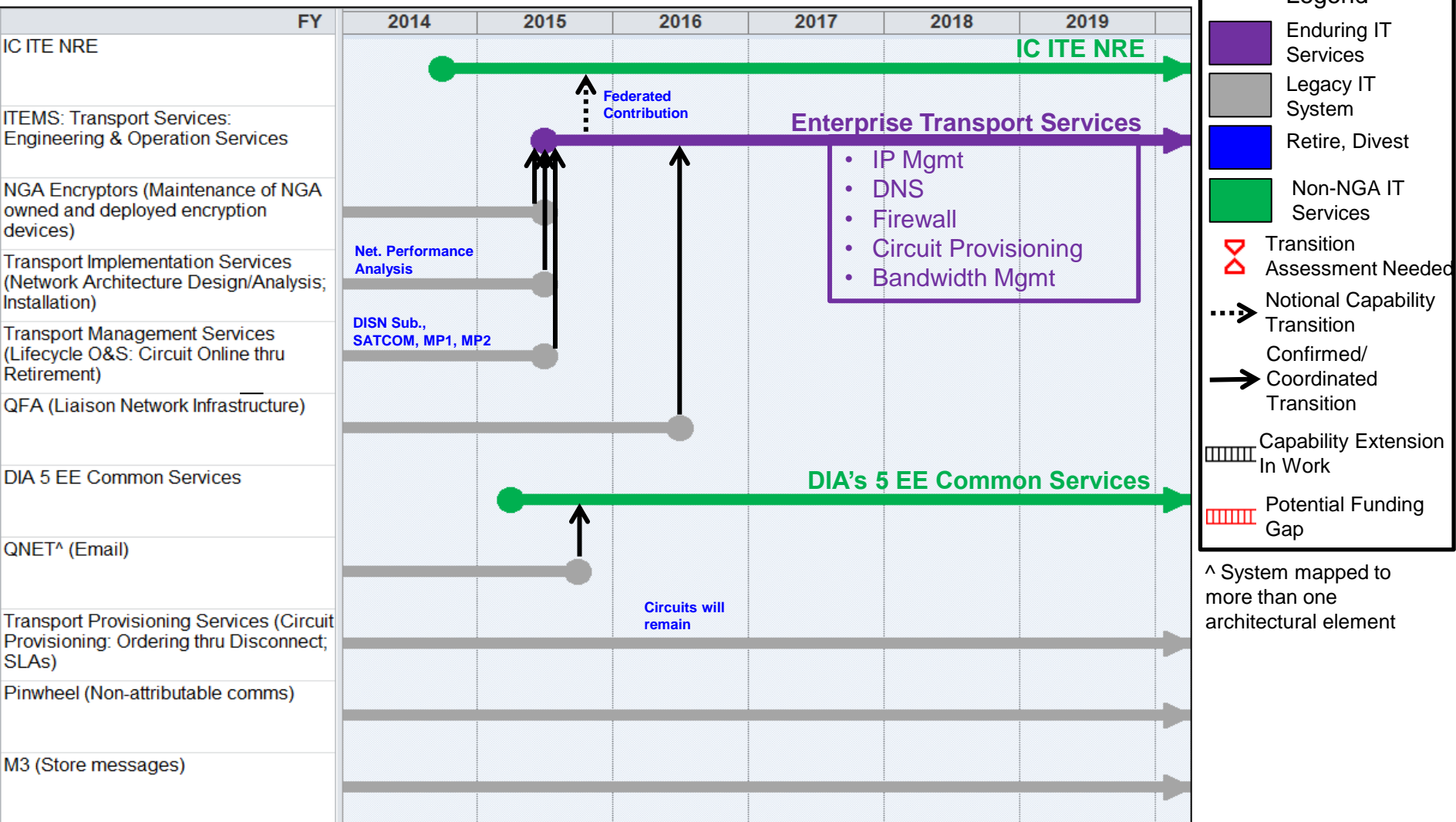
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## Open IT IPT: Transport Services

### Entity





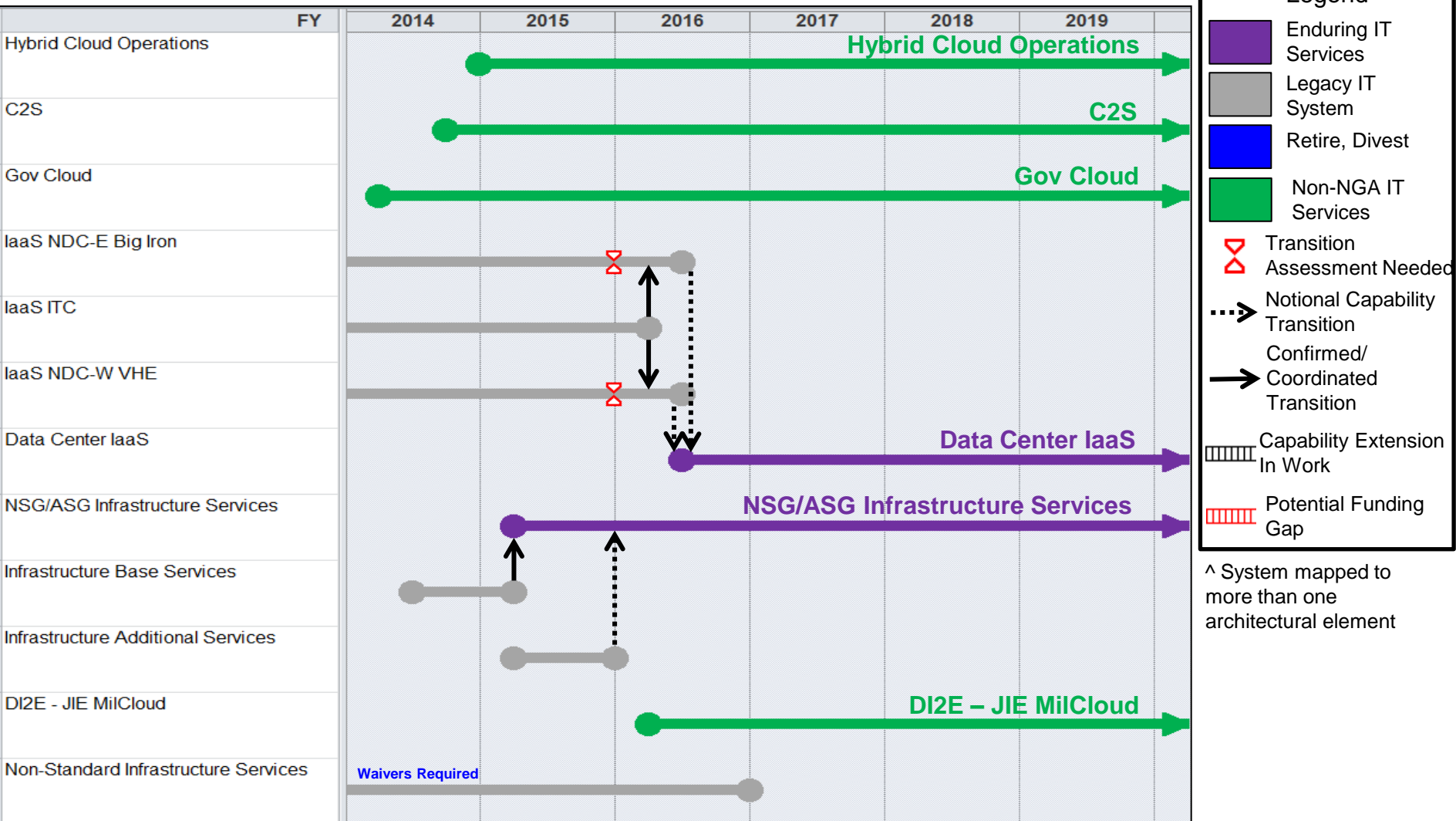


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## Open IT IPT: Data Center Services

### Entity





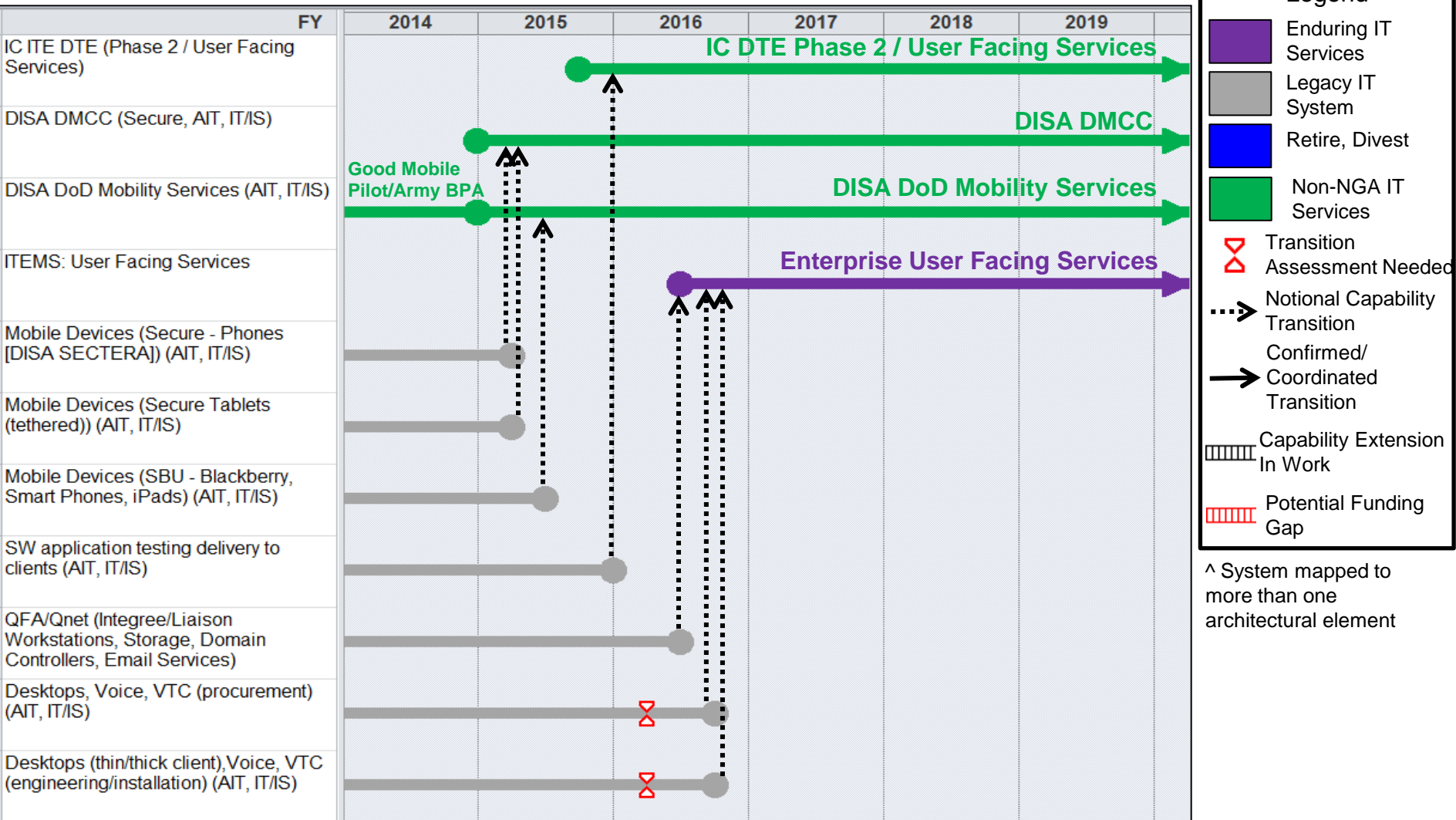
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7 July 2015

## Open IT IPT: Common Services

### Entity







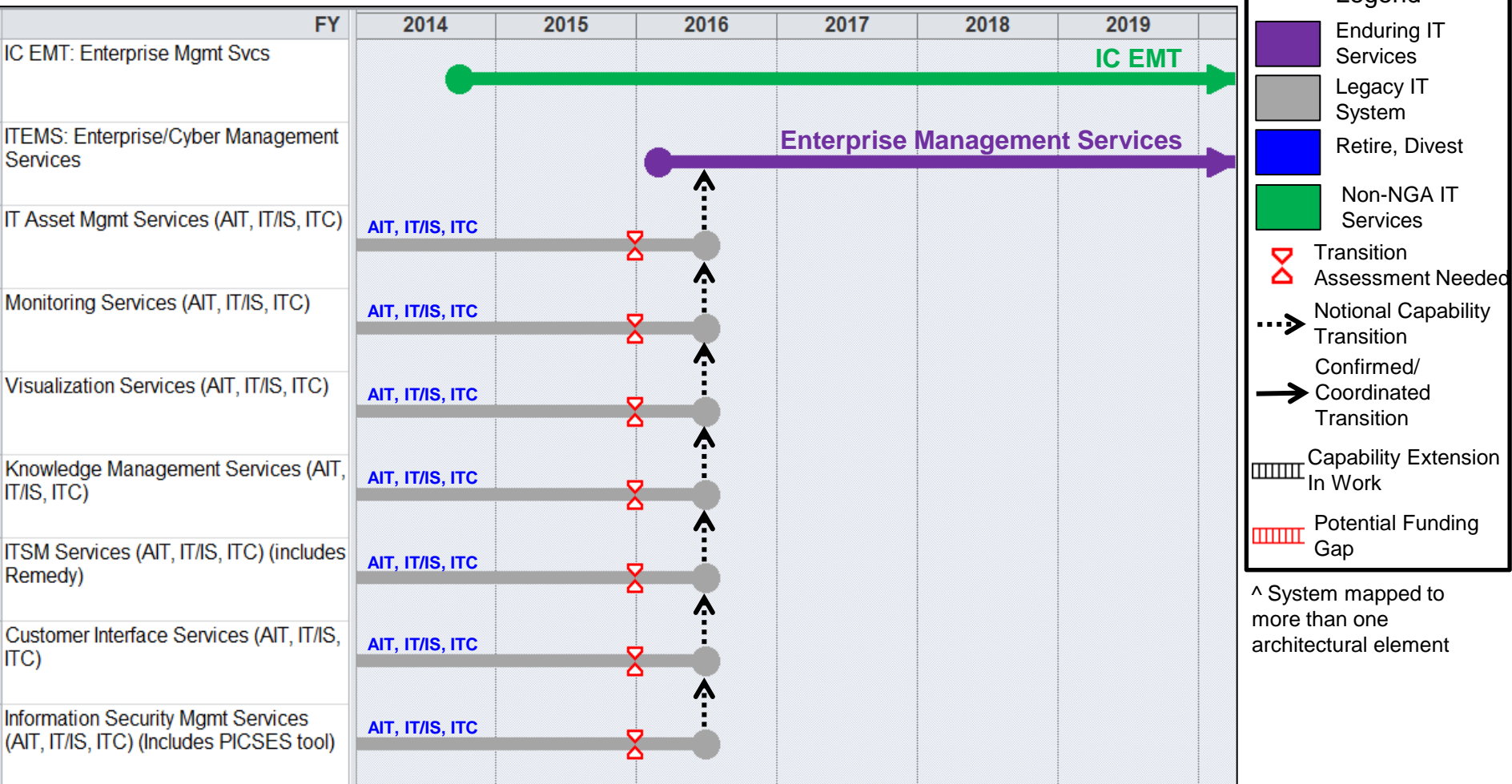
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Information current as of  
21 January 2015

## Open IT IPT: Unified Enterprise Management Services

### Entity





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# Acronyms



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## Know the Earth... Show the Way... Understand the World

5EE	Five Eyes
A2IAS	Agile Access Imagery Access Solution
AADD or A2D2	Agile Applications Development and Deployment Capability
AE	Active Earthscape
AEIA	Advanced Exploitation Intelligence Applications
AGI-IPL	Advanced Geospatial Intelligence - Image Product Library
AGITK	Advanced GEOINT Toolkit
AIT	Active Information Technology
AML	Apps Mall
AMS	Aeronautical Migration System
ARC	Acquisition Research Center
ASC	Analytic Services Contract
ASG	Allied System for Geospatial Intelligence
AWR	Advanced Workforce Reporting
BCN	Basic Cache Node
BPA	Blanket Purchase Agreement
CAFM	Computer Aided Facilities Management
C2S	Commercial Cloud Services
CASi	Consolidated Analytical Spatial Initiative
CDRG	Compressed Arc-second Raster Chart (ARC) Digitized Raster Graphics
CFPE	Consolidated Foundation Production Environment
CIB/VS	Controlled Image Base/Validation System
CJMTK	Commercial Joint Mapping ToolKit
CPD	Consolidated Products Database
CSPE	Consolidated Surface Production Environment
DCAFE	Data Capture and Finishing Environment
DF-IPL	Direct Feed Image Product Library
DI2E	Defense Intelligence Integration Enterprise
DIBDB	Digital International Boundaries Database
DISA	Defense Information Systems Agency
DMCC	DoD Mobility Classified Capability
DoD	Department of Defense
DTE	Desk Top Environment
DTED	Digital Terrain Elevation Data
DVOF	Digital Vertical Obstruction File
EADTT	Enterprise Automated Data Tagging Tools
EDM	Enterprise Data Management
EGIS	Enterprise Geospatial Information System
eGPL	Enhanced Geospatial Product Library

ELM	Enterprise Learning Management
ELT	Electronic Light Table
EMT	Enterprise Management Tool
EO	Electro-Optical
ePODS	Enterprise Product On Demand Service
ePSF	Electronic Personnel Security Folder
eRIMS	Electronic Records Information Management Systems
ES	Enterprise Search
ES&IS	Enterprise Search and Integrated Services
eSHOP	Enterprise Strategic Hardware Operations Procurement
FBG-A	Forward Based GEOINT - Aeronautical
FG	Foundation GEOINT
FGDS	Foundation GEOINT Dissemination Services
FITS	Financial Information Tool Suite
FMV	Full Motion Video
FSIMS	Full Spectrum Information Management System
FSG LOC	Full Spectrum GEOINT Limited Operational Capability
GALE	Generic Area Limitation Environment
GAS	GEOINT App Store
GCD	Geospatial Change Detection
GDAT-M	Geospatial Data Analysis Tool - Multisource
GDN	Gateway Data Navigator
GDP	GEOINT Delivery Platform
GDTs	GEOINT Data Transformation Service
GEB	Geospatially Enabled Baseline - Pilot
GEO-F	GEOINT Financials
GEOINT	Geospatial Intelligence
GeoNames	Geospatial Names
GEO-Q	application in IWG-R3
GeoSQL	Geospatial Search and Query Resource Locator (formerly ILS Next)
GERT	Graphical Exploitation Reporting Tool
GET-M	Geospatially Enabled Target Materials - Pilot
GETS	GEOINT Enterprise TPED Services
GGEPS	Geodesy and Geophysics Enhanced Production System
GIDI	Geospatial Intelligence Database Initiative
GIFD	Geospatial Intelligence Feature Database
GIMS	GEOINT Information Management Services/Resource Tasking & Marketplace
GMMI	GEOINT Mission Management Interface



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GOWK	Geospatial Observable Web Kit - Pilot
GRB	NGA Government Retirements and Benefits
GRID	Geospatial Repository and Data
GROOVE	Geospatial Requirements On-line One-stop Visualization Environment
GSM	GEOINT Solutions Marketplace
GVS	Geospatial Visualization Services
HG/CMOP	Human Geography Content Management Operational Pilot
HSIP	Homeland Security Infrastructure Program
IaaS	Infrastructure as a Service
IAE	Integrated Analytic Environment
IAS	Information Access Services
IC	Intelligence Community
IC DTE	Intelligence Community Desktop Environment
IC ITE	Intelligence Community Information Technology Enterprise
IDS-D	Information Dissemination Services- Direct Delivery
IEC	Integrated Exploitation Capability
IESS	Integrated Exploitation Support System
IFM	Information Manager
ILS Next	Integrated Library System Next
ILS Voyager	Integrated Library System Voyager
IPL	Image Product Library
IPT	Integrated Product Team
ISPS	Image Science Production Systems
iSToRE	Information Store
IT	Information Technology
ITC	Interim Transition Capability
ITEMS	Information Technology Enterprise Managed Services
IT/IS	Information Technology/Information Services
IWG-R3	Integrated Working Group Readiness Response Recovery
JAGWIRE	aka IAS
KWEB	Knowledge Management for Web 2.0
KZO	video and presentation software
LAISIC	Leveraging Available Intelligence to Support Improved Correlation
LCM	NGA Learning Content Management
LiDAR	Light Detection and Ranging
LSC	Legacy Sustainment Contract
M3	Multimedia Message Manager
MAAS	Multi-INT Analysis and Archive System
MAPS	Multi-INT Alerting and Processing Services
MARS	Mission ARchive Services
MI	Motion Imagery

MSI	multispectral imagery
MSP	Mensuration Services Program
MTI	Motion Target Indicator
N-CERTS	NGA Central Electronic Routing and Tasking
NCE	NGA Campus East
NCL	NSG Consolidated Library
NCW	NGA Campus West
NDIS	NSG Data Interim Store
NEAR	NGA Enterprise Architecture Repository
NEFDS	Non-Conventional Exploitation Factors Data System
NES	NSG Exploitation Services
NEWS	NGA Enterprise Workforce System
NGA	National Geospatial-Intelligence Agency
NGDS	Net-Centric GEOINT Discovery Services
NGL/CIL	NGA Libraries/Command Information Library
NGW	NGA Gateway
NIL	National Information Library
NLT	not later than
NMIS	NSG Motion Imagery Services
NRE	Network Requirements and Engineering
NSER	New System Evolutionary Roadmap
NSG	National System for Geospatial Intelligence
NSS	Navigation Safety System
NVS	NSG Video Services
O&S	Operations and Sustainment
ODIE	OPIR Data Integration & Exposure
OMAR	OSSIM (Open Source Software Image Map) Mapping Archive
OPF	Official Personnel Folder
OPIR	Overhead Persistent InfraRed
PCARD	Purchase Card
PDA	Preparation Discovery and Access
PISCES	Platform Independent Softcopy Exploitation Solution
PiX	Protected Internet Exchange
PLACES	no acronym - crowdsourced collection of local place name data
PMAA	Production Management Alternative Architecture
PMO	Program Management Office
QEC	Quadripartite Exploitation Capability
QFA	Quinquupartite Future Architecture
RDOTS	Real-time Dissemination and Operational Transmission Services
RFI	Request for Information
RTM	Resource Tasking and Marketplace





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SBC	Super Buffer Check
SBU	Sensitive But Unclassified
SER	System Evolution Roadmap
SERS	Seafloor Earth Reference System
SLA	Service Level Agreement
SMTS	Standardized Metadata Tagging Service
SOM	Structured Observation Management
SPF	Single Publishing Form
STARE	Spatial-Temporal Analytic Research Environment
STIL	St Louis Information Library
TASER	Total Application Services for Enterprise Requirements contract vehicle
TBD	To Be Determined
TBR	To Be Resolved
TDL	Tactical Data Library
TFDM	Topographic Feature Data Management
TK	Talent Keyhole
TMA	Target Monitoring Assistant
TMS	Target Management System
UWP	Unified Web Presence
VII	Visual Information Initiative
VTC	Video TeleConference
WARP	Web-Based Access and Retrieval Portal
WAS	Wide Area Surveillance
WMS	Web Map Service
WOOD	World-Wide Object and Observation Data-sphere now known as Global Unified Intelligence and Linked Data (GUILD)
WWIOE	WorldWide Infrastructure Outline Effort [aka SMACKDOWN]
WWNWS	WorldWide Navigation Warning System



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